WHAT IS CLAIMED IS:

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- 1. An external rotor brush DC motor comprising:
- a shaft fixedly mounted on a bracket;
- a permanent magnet mounted on a middle part of said shaft and 5 forming with said shaft a stator;
 - a front wheel and a rear wheel mounted on said shaft with a respective axle bearing and spaded from said permanent magnet at front and rear sides, said front wheel having a belt pulley formed integral with the periphery thereof, said rear wheel having a through hole;
 - a commutator provided at an outer side of said rear wheel for synchronous rotation with said rear wheel;
 - a shell connected between said front wheel and said rear wheel for synchronous rotation;
 - an iron core and a coil mounted in an inside wall of said shell and forming with said shell and said front wheel and said rear wheel a rotor, said coil having a lead wire inserted through the through hole of said rear wheel and electrically connected to said commutator;
 - a cover affixed to said shaft and covered over said commutator; and
- a left-side electric brush and a right-side electric brush fixedly mounted inside said cover and respectively pressed on said commutator.
 - 2. The external rotor brush DC motor as claimed in claim 1, wherein said left-side electric brush and said right-side electric brush are respectively fastened to said cover with a respective brush holder and a

respective spiral spring.

- 3. The external rotor brush DC motor as claimed in claim 1, further comprises a power cord inserted through said cover and electrically connected to said left-side electric brush and said right-side electric brush for receiving external AC power supply.
 - 4. The external rotor brush Dc motor as claimed in claim 1, further comprising a fan blade mounted on said front wheel.